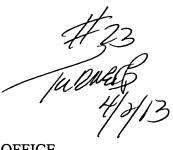


APPEAL BRIEF



Sir:

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Confirmation No.: 9680

Jeffrey C. HAWKINS

Group Art Unit No.: 2153

Serial No.: 09/087,552

Examiner: Le, Hieu C.

Filed: May 29, 1998

For:

METHOD AND APPARATUS FOR

WIRELESS INTERNET ACCESS

Box AF Commissioner of Patents Washington, D.C. 20231

This Appeal Brief is submitted in support of the Notice of Appeal filed on January 22, 2003.

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Client Ref. No.: 1751.Palm.PSI.US.P

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I. REAL PARTY IN INTEREST

Palm Inc. is the real party in interest.

II. RELATED APPEALS AND INTERFERENCES

Appellant is unaware of any related appeals or interferences.

III. STATUS OF CLAIMS

Claims 17-18, 28-29 and 33-43 stand rejected and are the only claims pending in this application. The application is in final rejection.

IV. STATUS OF AMENDMENTS

There are no amendments filed after the Final Office action for this case.

V. SUMMARY OF THE INVENTION

Embodiments of the invention provide for accessing data over a network using a wireless device. A user-input is entered through a wireless application that executes on the wireless device. (See specification, page 21, lines 22-29, "The browser 104 displays the user's home page ... the home page has been configured by the user with a set of service icons ...; the user clicks on one of the service icons...; page 20, line 2-4 "The browser is structured as a single user-interface...") The wireless application generates a compressed query and sends the compressed query to a proxy server that is external to the wireless device. (See specification, page 15, lines 9-11, "The browser is for generating queries and receiving responses..."; page 22, lines 3-4 "the browser sends a request out over the network..."; FIG. 1) The proxy server is for requesting data from Internet sites. (See specification, page 16, lines 26-29) A compressed response is received on the wireless device from the proxy server. (See specification, page 15, lines 9-11) The wireless application processes the compressed response in order to cause the data from the Internet site to be rendered on the wireless device from the compressed query. (See

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specification, page 15, lines 9-11, "The browser is for generating queries and receiving responses..."; see page 22, lines 5-7).

Embodiments of the invention include a portable computer having a display, a wireless communication mechanism, and a processor. (See specification, page 12, lines 15-17; FIG. 1 "screen 101"; page 5, line 13) The processor is configured to execute a wireless application, and to receive a user-input entered through the wireless application that is executed. (See specification, page 21, lines 22-29, "The browser 104 displays the user's home page ... the home page has been configured by the user with a set of service icons ... the user clicks on one of the service icons...; page 20, line 2-4 "The browser is structured as a single user-interface...") The processor generates a compressed query using the wireless application. (See FIG. 1) The processor is configured to communicate over a wireless medium, without use of a local proxy within the portable computer, with a proxy server that is external to the portable computer. (See discussion accompanying FIG. 1 in specification, pages 13-22) The processor communicates in this manner by sending the compressed query to the proxy server using the wireless communication mechanism, and receiving a compressed response from the proxy server over the wireless communication mechanism. (See specification, page 18, lines 20-25, and page 19, lines 1-5) The wireless application is executed to process the compressed response to cause the data from the Internet site to be rendered on the display from the compressed response. (See specification, page 22, lines 5-7)

VI. ISSUES

Whether Claims 17-18, 28-29, 33 and 35-36 are unpatentable under 35 U.S.C. §103(a) as being obvious over *Pepe et al.* (U.S. Patent No. 5,673,322) in view of *De Boor et al.* (U.S. Patent No. 6,173,316);

Whether Claims 34 and 37 are unpatentable under 35 U.S.C. §103(a) as being obvious over *Pepe et al.* (U.S. Patent No. 5,673,322) in view of *De Boor et al.* (U.S. Patent No. 6,173,316) and further in view of *Kikinis* (U.S. Patent No. 5,727,159);

Whether Claims 38-42 are unpatentable under 35 U.S.C. §103(a) as being obvious over *Kikinis* (U.S. Patent No. 5,727,159) in view of *Pepe et al.* (U.S. Patent No. 5,673,322) and further in view of *De Boor et al.* (U.S. Patent No. 6,173,316);

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Whether Claim 43 is unpatentable under 35 U.S.C. §103(a) as being obvious over *Kikinis* (U.S. Patent No. 5,727,159) in view of *Pepe et al.* (U.S. Patent No. 5,673,322), further in view of *De Boor et al.* (U.S. Patent No. 6,173,316), and further in view of *Lamming et al.* (U.S. Patent No. 6,144,997); and

Whether Claim 43 can be rejected under 35 U.S.C. §112, first paragraph, as containing subject matter which was not sufficiently described in the specification.

VII. GROUPING OF CLAIMS

It is respectfully submitted that Claims 17-18, 28-29, and 33-43 do not fall or stand together and the following groupings are asserted:

GROUP 1: Claims 17-18, 28-29, and 33-37.

GROUP 2: Claims 38-42.

GROUP 3: Claim 43.

VIII. ARGUMENTS

A. Introduction

It is well founded that to establish a *prima facie* case of obviousness under 35 U.S.C. §103(a), the references cited and relied upon must teach or suggest all the claim limitations. In addition, a sufficient factual basis to support the obviousness rejection must be proffered. *In re Freed*, 165 USPQ 570 (CCPA 1970); *In re Warner*, 154 USPQ 173 (CCPA 1967); *In re Lunsford*, 148 USPQ 721 (CCPA 1966).

A satisfactory suggestion to combine references is needed in order to make an obviousness rejection using multiple references. Under recent Federal Circuit case law, a suggestion to combine reference requires a showing that the suggestion to combine is "clear and particular." *In re Dembiczak*, 175 F.3d 994, 999 (CAFC 1999).

With respect to the present application, Applicant submits that the Examiner has misunderstood the references used in the rejection and the limitations recited in the claims, and has failed to locate all elements of the claims in the prior art. Furthermore, the Examiner has not disclosed a suggestion to combine references that meets the standards of the patent laws. Consequently, the rejections on record fail to meet the Examiner's *prima facie* burden

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for making the obviousness rejections on record, and these rejections should be withdrawn. A Notice of Allowance is requested once the rejections are withdrawn.

Brief Description of Cited References

Pepe et al. discloses a split proxy interface that encapsulates TCP/IP transmissions into a script transmissions in order to improve Internet access when using wireless or other low bandwidth communication network. The split proxy interface also provides compression, encryption, and filtering capabilities and allows receipt of unsolicited transmissions from the service provider for such purposes as automatically updating or configuring Internet access software.

Kikinis provides a system where relatively low-end computers (including portable computers) that are ordinarily incapable of Internet browsing functions may be enhanced to browse the Internet. An arrangement is provided that uses a proxy server with adequate computing power for Internet browsing and downloading functions. The system is capable of transposing downloaded files to alternative, low-information-density form suitable for rapid processing and display by connected portable and other low-end computers. The data link used may correspond to a TCP/IP pipe.

De Boor et al. provides functionality for a wireless communication device with a markup language based interface. The functionality enables direct access to Internet content, and enables such content to be integrated with telecommunication functions of the device. Browser processes are provided that use HTML type coding. A browser is provided on the wireless communication device. The browser includes protocol handlers which implement different protocols for accessing various functions of the wireless communication device. The browser also includes content handlers, which implement various content display mechanisms for fetching and outputting content on a screen display.

Lemming et al. describes a system where electronic documents may be distributed on a network that uses portable devices carried by users and in communication with the network through an infrared link. The portable devices are programmed to receive, transmit and store document references or tokens, each of which is associated with an electronic document stored in the database. The portable devices may be handheld or wristwatch computers with a graphical display for enabling users to transfer documents.

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C. Group I Claims

The Group I claims stand rejected under 35 U.S.C § 103(a) as being unpatentable over Pepe in view of DeBoor. It is respectfully submitted that these claims are patentable over *Pepe* and *DeBoor*, alone or in combination, for at least the reasons set forth below.

The Group I claims include several limitations which are distinguishable over the references on record. These limitations include the following: (1) the wireless application that receives the user-input is also the application that generates a query in response to the user-input; (2) the wireless application processing a compressed response in order to render retrieved data from the Internet, and (3) the wireless application generating a compressed query to retrieve data from the Internet.

The Application That Generates The Query (1)

The Group I claims are specific in stating that the compressed query is generated using the wireless application from which user-input is entered through. What this means is that the user enters input through a wireless application that is executing, and that same application creates the query that is sent to the proxy server.

This limitation is not taught or suggested by the cited references. In the Office Action dated October 23, 2002, the Examiner has provided two reasons for rejecting the difference between this particular limitation and Pepe. First, the Examiner states that the claims do not recite that "the wireless application that receives a wireless input, and that a compressed query is generated from the wireless input." (see Page 2 of the Office Action) But, to the contrary, Claim 17 states "receiving a user-input entered through a wireless application executing...; in response to the user-input, the wireless application generating a compressed query...." This language shared in the Group I claims are explicit and clear that a wireless application (e.g. browser 104 of Applicant's application) in which userinput is entered through also generates the compressed query in response to that userinput.

The other reason provided by the Examiner in the Office Action dated October 23, 2002 for rejecting the difference between this particular limitation and Pepe is that, in Pepe, "it is not true that both the local proxy and the web browser are being used to generate the query...." (see Page 3 of the Office Action) This statement misses the point. The Group I claims recite that a wireless application (browser 104) from which the user-

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input is received also generates the query in response to that user-input. Examiner's statement simply reaffirms that *Pepe* teaches two wireless applications are needed, one to receive the user-input (Pepe's browser) and the other to generate the query(Pepe's local proxy).

For *Pepe* to be the same as the particular limitation of the Group I claims, the browser of Pepe would also have to be the application that generates the query that is sent to the proxy server, as the browser is the application in which the user-input is entered through. However, this is not the case. In *Pepe*, the "query launched from the browser is submitted to the local proxy. The local proxy creates a query script... After the script is created, it is delivered to the remote proxy." [Pepe, Column 11, lines 45-56]. Thus, the browser is where the query is generated, but the local proxy is the application that generates and sends the query out to the remote proxy.

The Application That Processes The Compressed Response Pepe teaches that the local proxy is the application that primarily processes the data object retrieved from the remote proxy. For example, on Column 12 of Pepe, it states:

> After the actions are completed and delivered to the local proxy, the local proxy matches the reply script with the request script. ... The local proxy then parses through the reply script ad extracts the internal data object. Thus, two things need to happen with the reply script in the local proxy. The reply script must be matched with the request. and the local proxy must extract the data object out and deliver it to the appropriate place in the operating system so that the browser can display the object in its viewer.

In contrast, Applicant's Group I claims recite "executing the wireless application to process the compressed response in order to cause the data from the Internet site to be rendered on the wireless device from the compressed response." Thus, a wireless application (browser 104) where the user-input in entered through also generates a request in response to that user-input is also the application that processes the reply. This feature is not taught or suggested by the cited references.

(3) Compressed Queries

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None of the references on record, including Pepe and DeBoor, alone or in combination, teach or suggest a method for accessing data over a network using a wireless device where compressed queries are used by the wireless device to request data. In past Office Actions, the Examiner has repeatedly asserted that *Pepe* teaches generating a compressed query (see Office Action mailed September 11, 2001). To the contrary, there is absolutely nothing in *Pepe* to suggest that the request generated by local proxy 56 is compressed. The Office Action mailed on September 11, 2001 refers to FIG. 5 in support of the assertion that *Pepe* teaches the generation of compressed queries. However, as described in *Pepe* at Col. 11, line 35 through Col. 12, line 19, local proxy 56 creates a query script that specifies the type of compression to be used on the data object supplied back to user terminal 52 in response to the query, not compression to be applied to the query itself. In DeBoor, there is no teaching or suggestion that the wireless communications device generates compressed queries for data.

In response to the arguments above that have previously been made by the Applicant, the Examiner has stated:

> In Fig. 5, the Lp (local proxy) creates a query script setting compress, Filters and encrypt (i.e. the Lp performs compressions, filtering and encryption of the query) and in step 66, the remote proxy unpackages the query (decompress) and performs compress, filters and encrypts data and reply to the local proxy. It is very clear that both the local and remote proxies perform compression, filtering and encryption which is the same thing as generating a compressed query.

This statement is erroneous for several reasons. First, the statement does not correctly convey what *Pepe* describes. What *Pepe* actually states in the specification regarding the portion of *Pepe's* FIG. 5 that is described by the Examiner is:

> the query launched from the browser is submitted to the local proxy. The local proxy creates a query script, and places settings in that script defining the type of compression to be used on the data object or the types of compressions that are available. The local proxy also places settings in the script for the filters and the encryption type to be applied to that data object. The settings

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Second, the acts of performing compression, filtering and encryption are not the same thing as generating a compressed query. The performance of such steps does not mean that the steps have been performed on the particular thing that the claims recited. The Examiner is using an overly broad brush in an attempt to apply the reference to the claims, when in fact the claim is different from the reference.

Second, *Pepe* and *DeBoor*, alone or in combination, do not in any way teach or suggest a method for accessing data over a network using a wireless device where a wireless application executing on the wireless device both receives user input and generates a compressed query in response to the user input, as is required by the Group I claims. Claim 17, for example, specifically requires the steps of "receiving a user-input entered through a wireless application executing on the wireless device" and "in response to the user-input, the wireless application generating a compressed query." In Pepe, the Web browser 54 receives the user input, but does not generate any queries. Local proxy 56 generates queries, although not compressed queries as previously described herein, but does not receive any user input. In DeBoor, none of the elements of the wireless communications device both receive user input and generate a compressed query in response to the user input.

For at least these reasons, it is therefore respectfully submitted that Pepe and DeBoor, alone or in combination, do not in any way teach or suggest the features of the Group I claims.

D. Group II Claims

Claim 38 is the independent claim of the Group II claims. This claim stands rejected as being obvious over Kikinis in view of Pepe and further in view of De Boor.

Claim 38 recites a portable computer that has a processor configured to perform steps that include "receive a user-input entered through execution of the wireless application; generate a compressed query using the wireless application." The claim also states that the processor is configured to "execute the wireless application to process the

Attorney Docket No.: 60072-0704 -9compressed response..." The difference between these steps and the cited references are discussed in detail with Section C of this Appeal Brief.

Claim 38 further recites the additional limitation that the processor is configured to:

> communicate over a wireless medium, without use of a local proxy within the portable computer, with a proxy server that is external to the portable computer by (i) sending the compressed query to the proxy server using the wireless communication mechanism, and (ii) receiving a compressed response from the proxy server over the wireless communication mechanism.

In the Office Action of October 23, 2002, the Examiner states that Kikinis teaches use of a satellite link to connect the hand held unit to the proxy server. (see Page 10 of the Office Action). The Examiner further states that the communications are compressed because Column 7, lines 17-24 teach that the data conveyed from the proxy server to the hand-held unit is compressed.

The Examiner's statements regarding the applicability of Kikinis are faulty for several reasons. First, the Examiner has still not addressed the query being compressed. Second, what *Kikinis* describes that is being attributed as compression is in fact scaling. Compression is temporary coding used for sending data over a transmission medium. Kikinis is in fact describing how to map data made for a large screen into a size suitable for a smaller screen.

E. Group III Claim

Claim 43 is dependent on Claim 38. It recites the additional features of the display being contact-sensitive, and the limitation of the processor receiving user-input by detecting contact to the display.

Rejection Under 35 U.S.C. §112, first paragraph (1)

Previously, Applicant has stated that the support for the limitation using "contactsensitive" may be based on the description where the wireless device is described as a PALM device. In response, the Examiner has stated that "while it is true that the specification describes that the invention is operable on a PALM III device, the specification as originally filed does not recite or suggest anywhere that PALM III device

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has a contact-sensitive screen that detects contact to display as claimed." Applicant's position is that there is no requirement for the Applicant to describe all well-known features of PALM devices in order to claim such features. The fact that PALM devices have contact-sensitive screens is known to millions who use or have used the device. Certainly, recitation of PALM device in the specification shows Applicant was in possession of the invention that us the subject of Claim 43.

(2) Obviousness Rejection

While Applicant admits that the prior-art includes the concept of "contact-sensitive" displays, Applicant submits that contact-sensitive displays have not previously been used in the context of the recited claims. Specifically, the user-input that is recited in the claims may be entered using the contact-sensitive display. In response to this input, the compressed query is generated. For this reason, and for reasons stated above in Sections C and D, Claim 43 is allowable over the cited references.

F. <u>Lack of Suggestion To Combine</u>

For all of the claims, the Examiner has yet to provide a satisfactory suggestion to combine references in the manner stated by the Examiner. The Federal Circuit has required that any suggestion to combine references when making an obviousness suggestion must be "clear and particular." With each rejection, the Examiner has stated that it would have been obvious to combine the cited references in the manner stated by the Examiner in order to achieve the stated advantages of the invention. This is the definition of hindsight.

The suggestion provided by the Examiner is the essence of hindsight. It is the kind of analysis repeatedly prohibited by the Federal Circuit, recently in *In re Dembiczak*. The *Dembiczak* court stated:

Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references. Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as

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a blueprint for piecing together the prior art to defeat patentability--the essence of hindsight. *In re Dembiczak* at 1999.

This court held that a showing of a suggestion to combine "must be clear and particular". *Id*.

In many cases, the Examiner has relied on three or four references. When using three or more references, there is a greater need regarding the quality of the suggestion to combine the references.

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IX. CONCLUSION AND PRAYER FOR RELIEF

For the reasons set forth above, Applicant respectfully requests that the outstanding rejections to the pending claims of this application be reversed or withdrawn, and that a Notice of Allowance be granted for this application.

Respectfully submitted,

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APPENDIX

- 17. A method for accessing data over a network using a wireless device, the method comprising:
 - receiving a user-input entered through a wireless application executing on the wireless device;
 - in response to the user-input, the wireless application generating a compressed query;
 - sending the compressed query to a proxy server external to the wireless device to cause the proxy server to request data from an Internet site;
 - receiving a compressed response from the proxy server, the compressed response including data from the Internet site; and
 - executing the wireless application to process the compressed response in order to cause the data from the Internet site to be rendered on the wireless device from the compressed response.
- 18. The method of claim 17, wherein the method further includes: displaying a list of wireless applications on the wireless device; and wherein receiving a user-input includes:
 - receiving a user selection of the wireless application from the list of wireless applications displayed on the wireless device; and
 - in response to the user selection, displaying a query form to allow a user to enter the user-input.
- 28. A computer-readable medium for wireless communications, the computer-readable medium carrying instructions which, when

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executed by one or more processors, cause the one or more processors to perform steps of:

receiving a user-input entered through a wireless application executing on the wireless device;

in response to the user-input, using the wireless application to generate a compressed query from the wireless application;

sending the compressed query to a proxy server external to the wireless device to cause the proxy server to request data from an Internet site;

receiving a compressed response from the proxy server, the compressed response including data from the Internet site; and

executing the wireless application to process the compressed response in order to cause the data from the Internet site to be rendered on the wireless device from the compressed response.

29. The computer-readable medium of claim 28, further carrying instructions for performing steps of: displaying a list of wireless applications on the wireless device: receiving a user selection of the wireless application from the list of wireless applications displayed on the wireless device; and

in response to the user selection, displaying a query form to allow a user to enter the user-input.

33. The method of claim 17, wherein executing the wireless application to generate a compressed query includes generating the query in compressed transport protocol (CTP).

- 34. The method of claim 17, wherein executing the wireless application to generate a compressed query includes generating the query in compressed markup language (CML).
- 35. The method of claim 17, wherein executing the wireless application to render the data includes executing the wireless application to use the compressed response without converting the compressed response to another protocol.
- 36. The computer-readable medium of claim 29, wherein instructions for executing the wireless application to generate a compressed query includes generating the compressed query in compressed transport protocol (CTP).
- 37. The computer-readable medium of claim 29, wherein instructions for executing the wireless application to generate a compressed query includes generating the compressed query in compressed markup language (CML).
- 38. A portable computer comprising:
 - a display;
 - a wireless communication mechanism; and
 - a processor configured to:

execute a wireless application;

receive a user-input entered through execution of the wireless application;

generate a compressed query using the wireless application; communicate over a wireless medium, without use of a

local proxy within the portable computer, with a proxy server that is external to the portable computer by (i) sending the compressed query to the proxy server using the wireless communication mechanism, and (ii) receiving a compressed

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response from the proxy server over the wireless communication mechanism; and execute the wireless application to process the compressed response to cause the data from the Internet site to be rendered on the display from the compressed response.

- 39. The portable computer of claim 38, wherein the processor is configured to:
 - display a list of wireless applications on the display; receive a user selection of the wireless application from the wireless applications displayed on the display; display on the display a query form to allow a user to enter the user-input in response to receiving the user selection.
- 40. The portable computer of claim 38, wherein the processor generates the compressed query in compressed transport protocol (CTP).
- 41. The portable computer of claim 38, wherein the processor generates the compressed query in compressed markup language (CML).
- 42. The portable computer of claim 35, wherein the processor executes the wireless application to use the compressed response without converting the compressed response to another protocol.
- 43. The portable computer of claim 35, wherein the display is contactsensitive, and wherein the processor receives user-input by detecting contact to the display.

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